In the Claims:

1. (Previously Presented) A method for efficiently transporting digital files over a peer-to-peer network comprising at least one server node and multiple client nodes, the method comprising the steps of:

a. when a digital file is to be transferred over the network from a sending node to a receiving node, allowing other nodes to submit bids to transport the file over the peer-to-peer network for a particular price; and

b. allowing the node with a lowest bid to transport the file to the receiving node, thereby optimizing network traffic based on economics.

2. (Original) The method of claim 1 further including the step of paying a user of the transporting node the particular price.

3. (Original) The method of claim 2 further including the step of billing a user of the sending node.

4. (Previously Presented) The method of claim 1 further including the step of allowing a sender to specify a particular quality of service for delivery of the file, the quality of service including immediate delivery and scheduled delivery.

5. (Previously Presented) The method of claim 4 further including the step of setting the price to transport the file based on the quality of service specified.

6. (Previously Presented) The method of claim 5 further including the step of if the specified quality of service is immediate delivery, then sending the file peer-to-peer.

7. (Currently Amended) The method of claim 6 further including the step of if the specified quality of service is immediate delivery and the receiving node is off-line, uploading the file from the sending node to the server node, and delivering the file from the server node when the receiving node comes online.

8. (Previously Presented) The method of claim 6 further including the step of if the specified quality of service is scheduled delivery, then queuing file transmission until a scheduled time.

9. (Previously Presented) The method of claim 4 further including the step of requiring the submitted bids to include price and the quality of service.

10. (Previously Presented) A peer-to-peer network for efficiently transporting digital files, the network including at least one server node and multiple client nodes coupled to the network, the network further comprising:

means for allowing other nodes to submit bids to transport a digital file over the peer-to-peer network for a particular price when the file is to be transferred from a sending node to a receiving node; and

means for allowing the node with a lowest bid to transport to file to the receiving node, thereby optimizing network traffic based on economics.

11. (Original) The network of claim 1 wherein a user of the transporting node is paid the particular price.

12. (Original) The network of claim 11 wherein a user of the sending node is billed.

13. (Previously Presented) The network of claim 10 wherein a sender specifies a particular quality of service for delivery of the file, wherein the quality of service includes immediate delivery and scheduled delivery.

14. (Original) The network of claim 13 wherein the price to transport the file is determined based on the quality of service specified.

15. (Original) The network of claim 14 wherein the file is sent peer-to-peer if the specified quality of service is immediate delivery.

16. (Currently Amended) The network of claim 15 wherein if the specified quality of service is immediate delivery and the receiving node is off-line, then the file is uploaded from the sending node to the server node, and the file is delivered from the server node when the receiving node comes online.

17. (Original) The network of claim 15 wherein if the specified quality of service is scheduled delivery, then the file is queued for transmission until a scheduled time.

18. (Previously Presented) The network of claim 10 wherein the submitted bids include price and a quality of service.

19. (Previously Presented) A method for efficiently transporting digital files comprising,

a. providing a peer-to-peer network that includes at least one server node and multiple client nodes;

b. when a digital file is to be transferred over the peer-to-peer network from a sending node to a receiving node, allowing other nodes to submit bids to transport the file over the peer-to-peer network for a particular price;

c. allowing the node with a lowest bid to transport to file to the receiving node; and

d. billing a user account of the sending node, and paying a user of the transporting node the particular price, thereby optimizing network traffic based on economics.

20. (Previously Presented) The method of claim 19 further including the step of allowing a sender to specify a particular quality of service for delivery of the file, the quality of service including immediate delivery and scheduled delivery.

21. (Previously Presented) The method of claim 20 further including the step of setting the price to transport the file based on the quality of service specified.

22. (Previously Presented) The method of claim 21 further including the step of if the specified quality of service is immediate delivery, then sending the file peer-to-peer.

23. (Currently Amended) The method of claim 22 further including the step of if the specified quality of service is immediate delivery and the receiving node is off-line, uploading the file from the sending node to the server node, and delivering the file from the server node when the receiving node comes online.

24. (Previously Presented) The method of claim 23 further including the step of if the specified quality of service is scheduled delivery, then queuing file transmission until a scheduled time.

25. (Previously Presented) The method of claim 24 further including the step of requiring the submitted bids to include price and a quality of service.

26. (Original) A peer-to-peer network for efficiently transporting digital files, the network including at least one server node and multiple client nodes coupled to the network, the network further comprising:

means for allowing other nodes to submit bids to transport a digital file over the network for a particular price when the file is to be transferred over the network from a sending node to a receiving node;

means for allowing the node with a lowest bid to transport to file to the receiving node; and

means for billing a user account of the sending node, and paying a user of the transporting node the particular price, thereby optimizing network traffic based on economics.

27. (Previously Presented) The network of claim 26 wherein a sender specifies a particular quality of service for delivery of the file, wherein the quality of service includes immediate delivery and scheduled delivery.

28. (Original) The network of claim 27 wherein the price to transport the file is determined based on the quality of service specified.

29. (Original) The network of claim 28 wherein the file is sent peer-to-peer if the specified

quality of service is immediate delivery.

30. (Currently Amended) The network of claim 29 wherein if the specified quality of service is immediate delivery and the receiving node is off-line, then the file is uploaded from the sending node to the server node, and the file is delivered from the server node when the receiving node comes online.

31. (Original) The network of claim 30 wherein if the specified quality of service is scheduled delivery, then the file is queued for transmission until a scheduled time.

32. (Previously Presented) The network of claim 31 wherein the submitted bids include price and the quality of service.

33. (Previously Presented) A method for efficiently transporting digital files, comprising the steps of:

a. allowing a user to become a member of a network by installing and executing a copy of a peer-to-peer client application on the user's computer;

b. receiving registration information entered by the user, and generating a user account;

c. in response to the user publishing one or more files, prompting the user to select a quality of service for file delivery;

d. calculating a total fee to charge the user for delivery of the file and automatically billing the user's account;

e. offering delivery of the file up for bidding from a central location;

f. accepting bids to transport the file from other nodes;

g. comparing the received bids and choosing the node that submitted a lowest price to transport the file; and

h. paying a user of the transporting node, thereby allowing the user of the transporting node to generate extra revenue and optimizing network traffic based on economics.

34. (Previously Presented) The method of claim 33 wherein step (b) further includes the step of generating a digital certificate for the user that includes a public key and a private key.

35. (Previously Presented) The method of claim 34 wherein step (b) further includes the step of storing the user's account information and the user's public key and private key in at least one database accessible by a server node.

36. (Previously Presented) The method of claim 35 wherein step (c) further includes the step of publishing the file by making the file publicly available on the network for searching by other client nodes by adding the file to a searchable index of shared files on the server node.

37. (Previously Presented) The method of claim 36 wherein step (c) further includes the step of publishing the file for direct file transfer.

38. (Previously Presented) The method of claim 37 wherein step (d) further includes the step of showing the user a fee charged for each level of quality of service.

39. (Previously Presented) The method of claim 38 further including the step of digitally signing the file and storing the digital signature on the server node for file authentication.

40. (Previously Presented) The method of claim 39 further including the step of uploading a copy of the file to the server node so that when the recipient node is off-line at the time the file is to be delivered, the server node can deliver the file when recipient node comes back on-line.

41. (Previously Presented) The method of claim 40 wherein step (e) further includes the step of providing the offer as an entry on a web page that includes a name and size of the file, a chosen quality of service, a location of the recipient, and a bid submission time limit.

42. (Previously Presented) The method of claim 41 wherein step (f) further includes the step of identifying in the bid a bidding node, and a predetermined price and quality of service for delivering the file.

43. (Previously Presented) The method of claim 42 wherein step (g) further includes the step

of choosing the bid that has the lowest price and that matches the quality of service in the offer.

44. (Previously Presented) The method of claim 43 wherein step (g) further includes the step of providing the node that submitted the chosen bid with information necessary to transport the file across the network.

45. (Previously Presented) A peer-to-peer network for efficiently transporting digital files, the network including at least one server node and multiple client nodes coupled to the network, the network further comprising:

other nodes adapted to submit bids to transport a digital file over the peer-to-peer network for a particular price when the file is to be transferred from a sending node to a receiving node; and

wherein one node of the other nodes with a lowest bid to transport the file to the receiving node is selected to transport the file, thereby optimizing network traffic based on economics.

46. (Previously Presented) A peer-to-peer network for efficiently transporting digital files, the network including at least one server node and multiple client nodes coupled to the network, the network further comprising:

other nodes adapted to submit bids to transport a digital file over the network for a particular price when the file is to be transferred over the network from a sending node to a receiving node;

one of the other nodes being selected based on the one of the other nodes having a lowest bid to transport to file to the receiving node; and

the one of the other nodes selected to transport the file further adapted to bill a user account of the sending node, such that a user of the transporting node is paid the particular price, thereby optimizing network traffic based on economics.